



# An Update on the Jasper Ocean Terminal

March 11, 2011

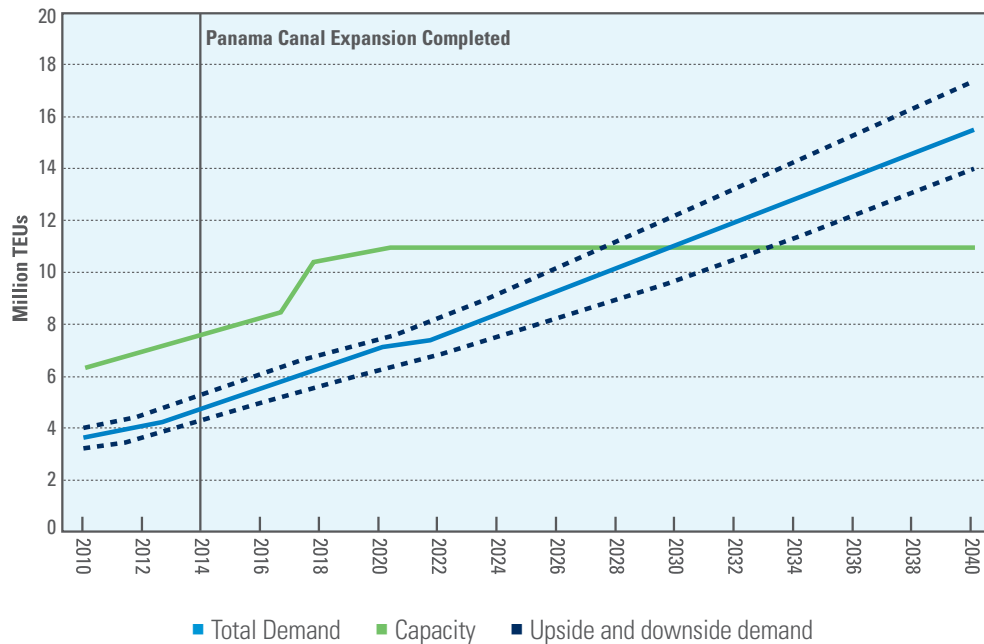
## WHAT'S INSIDE

Executive Summary, Page 3  
A Landmark Opportunity, Page 4  
The Demand, Page 6

The Benefits, Page 7  
Technical Details, Page 11  
Timeline, Page 14

Strengthening Our Ports Authorities,  
Page 16  
The Road Forward, Page 17  
FAQs, Page 18

## CHARLESTON, GARDEN CITY DEMAND AND CAPACITY



SOURCE: Moffatt and Nichol

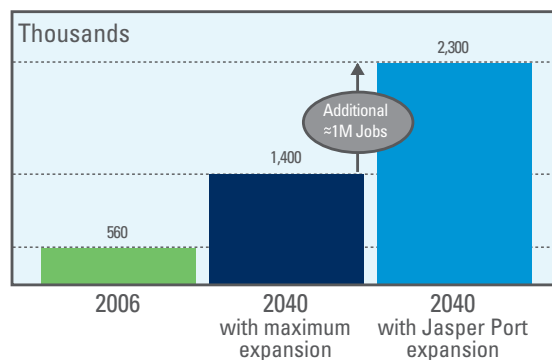
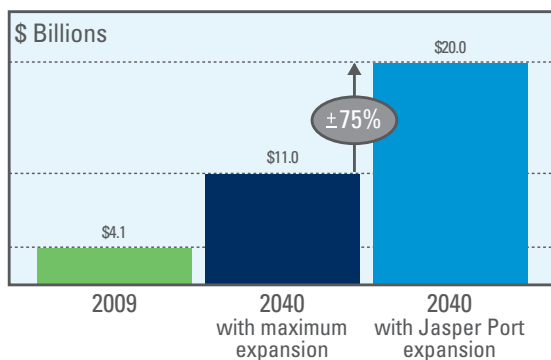
## THE JASPER TERMINAL COULD ADD ONE MILLION JOBS AND \$9 BILLION TAX REVENUE TO SOUTH CAROLINA AND GEORGIA

**PORT EXPANSION CAN SIGNIFICANTLY INCREASE STATE AND LOCAL TAX REVENUES IN 2040...**

**...AND GENERATE SUBSTANTIAL EMPLOYMENT OPPORTUNITIES**

State and local taxes<sup>1</sup> generated by ports in South Carolina and Georgia

Jobs<sup>2,3</sup> created by ports in South Carolina and Georgia



- Assuming taxes and jobs scale with port volume
- Assumes that higher container density and efficient operations will lead to increased port utilization of existing port facilities

<sup>1</sup> Taxes measured in billions

<sup>2</sup> Jobs measured in thousands

<sup>3</sup> Job creation does not include construction

SOURCE: American Association of Port Authorities (AAPA), University of Georgia study, Willbur Smith Associates, US Census Bureau

## EXECUTIVE SUMMARY

*With our nation's trade realities changing, one-time challenges are becoming future opportunities.*

After years of competition, Georgia and South Carolina have agreed to jointly develop and oversee a deep-water container terminal on the banks of the Savannah River. This new port—known as the Jasper Ocean Terminal—has the potential to generate one million jobs and \$9 billion in tax revenue for the two states by the year 2040<sup>1</sup>.

In 2007, this opportunity convinced South Carolina Gov. Mark Sanford and Georgia Gov. Sonny Perdue to put aside years of litigation and agree upon a collaborative approach for development of the Jasper Ocean Terminal. This was documented in a term sheet and subsequently an intergovernmental agreement to deepen the harbor and free a large potential site from an easement held for dredge placement:

"m. After the release, modification or removal of the Corps Easement from the Phase One property and the required approval and ratification of the interstate compact approving the Bi-State Compact Authority by the Georgia and South Carolina legislatures and the U.S. Congress, the parties acknowledge that the deepening of the Savannah River navigation channel as conditionally authorized in the federal 1999 Water Resources Development Act and set forth as the Savannah Harbor Project further described at [www.sav-harbor.com](http://www.sav-harbor.com) will be beneficial to the development of the Phase One Property."

This simple deal, to support deepening the harbor, enter a bi-state compact and release the easement, led to establishing the Joint Project Office. Work done since then has confirmed the value of the enterprise and the wisdom of the agreement.

Driving this opportunity are several factors that will cause East Coast container traffic to triple by 2020<sup>2</sup>:

- Southeastern businesses and farmers produce many of the most valued exports in the United States, including agricultural products and industrial equipment. These exports generate tremendous private- and public-sector revenue. Demand will increase for these raw materials which, in turn, will drive the increase in exported cargo.
- A 2014 expansion of the Panama Canal will enable vessels up to three times larger than most ships that currently traverse the canal to quickly and easily reach ports along the East Coast. This will reduce the cost of a container from Shanghai traveling into the Southeast by roughly 20 percent, extending the region's logistics competitiveness into the Midwest.
- Population and business growth in the Southeast are expected to drive consumer demand for imported products.
- More goods are being manufactured in Southeast Asia, and that cargo is being shipped through the Suez Canal and then to the East Coast, bringing additional containers to the region.

Located 10 miles downstream of Savannah's Garden City Terminal, the Jasper Ocean Terminal will be built on recovered dredge material along the Georgia-South Carolina border. Once completed, it will be the premier port on the East Coast, complete with state-of-the-art technology and green features that will reduce its environmental footprint and increase service efficiencies.

The Jasper Ocean Terminal will be designed as a state-of-the-art, world-class terminal able to handle effectively the new post-Panamax ships (up to 12,600 TEUs) which require 50-foot depth and 158-foot width. The Georgia Ports Authority, through its Savannah Harbor Expansion Project, is planning to deepen the river channel from 42 to 48 feet ahead of the required schedule for the terminal, and the South Carolina State Ports Authority also is planning to deepen the harbor in Charleston.

As planned, the new terminal will feature 10 berths (phased in to meet rising demand), a turning basin, road and rail access corridors, and supporting infrastructure on 1,500 acres in Jasper County, S.C. This new investment will increase the region's capacity by seven million twenty-foot equivalent units (TEUs) while propelling the local economy of one of the nation's poorest counties.

Despite recent and planned investments to upgrade and expand facilities in Charleston and Savannah, both ports are expected to be at capacity for container throughput between 2025 and 2030. The Jasper Ocean Terminal will handle the millions of additional containers that current plans for Georgia and South Carolina will not.

To seize the opportunity, the two states must put aside their differences and continue to work together to turn future opportunities into jobs and dollars for their citizens. If not, international shippers will move to other states offering more capacity, greater efficiency and deeper harbors.

<sup>1</sup> University of Georgia study; Wilbur Smith & Associates study

<sup>2</sup> American Association of Ports Authorities; Moffatt & Nichol

## A LANDMARK OPPORTUNITY

Located approximately 12 miles from the sea buoy, the 1,500-acre Jasper Ocean Terminal site is widely considered to be the best remaining undeveloped port site on the East Coast. For more than 15 years, local leaders have sought a port in Jasper County.

While located on the South Carolina side of the Savannah River, the site was controlled by the Georgia Department of Transportation and utilized by the U.S. Army Corps of Engineers for storing dredge material. The desire to secure the land for a port led to protracted litigation between Georgia and South Carolina.



### Accomplishments to Date

Recognizing not just the need but also the potential of a shared port, Governors Perdue and Sanford signed a memorandum of understanding in 2007, setting up the original framework to guide the construction and oversight of the Jasper Ocean Terminal. The premise was simple—there was more to be gained by working together than competing against one another. Since then, much has been done.

Most importantly, the landmark agreement paved the way for an intergovernmental agreement and the establishment of the Joint Project Office. Comprised of six volunteer board members—three from each state—the Joint Project Office is charged with developing the new port.

In July 2008, the Joint Project Office, working through the Georgia and South Carolina ports authorities, evaluated potential sites, secured funds and jointly acquired the 1,500-acre Jasper County site from the Georgia Department of Transportation for \$7.5 million or \$3.75 million from each state<sup>3</sup>.

The Joint Project Office has also contracted with Moffatt & Nichol, one of the most respected maritime engineering firms in the world, to manage the process of conducting site analysis, planning and permitting. The process will be lengthy, but strategic and thorough. The resulting analysis will guide the port through complex federal and state processes and ensure protection of the delicate Lowcountry ecosystem.

Throughout 2009 and 2010, the Joint Project Office and Moffatt & Nichol interfaced with the U.S. Army Corps of Engineers for guidance on the permitting process and a dredge material management plan, finalized capacity and economic studies, and developed a detailed Preliminary Planning & Development Services Report that will guide the port's development.

In late 2010, the Joint Project Office retained Doug Marchand, a respected port executive, as a part-time executive advisor, to guide the port forward.

### Full Speed Ahead

Currently, the site is under easement running to the U.S. Army Corps of Engineers, which manages the dredging process for the Savannah River. The Corps has indicated that, if the two states work together to develop the property and manage a joint port, which includes identification of an alternate site for dredge disposal, it will release the easement once the permitting process is complete.

Given these factors, the 15-year timetable for permitting and construction is not unusual. Georgia has devoted the past 15

<sup>3</sup> The Joint Project Office acquired 1,517.8 acres at \$5,000 per acre for a total purchase price of \$7,588,900 or \$3,794,450 from each state.

years to the permitting and study of deepening the Savannah River, while South Carolina, which received approval to expand the Charleston port in 2007, projects to open its new terminals in 2018. The two authorities have used long-term planning to grow their businesses over the past two decades.

The Jasper Ocean Terminal will be designed as a state-of-the-art, world class terminal, able to handle effectively the new Panamax 12,000 TEU ships, requiring 50-foot depth and 158-foot width. The Georgia Ports Authority, through the Savannah Harbor Expansion Project, is planning to deepen the river channel from 42 to 48 feet, ahead of the required schedule for the Jasper Ocean Terminal.

Charleston, too, is planning to deepen its harbor.

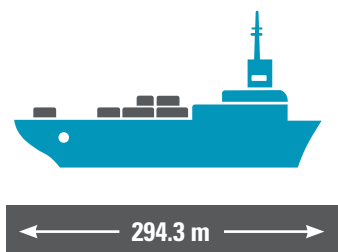


The proximity and accessibility of three deep-water ports in the Southeastern U.S. has the potential to transform the region into a global shipping hub. With a projected 12 million-plus TEUs expected to pass through the ports of Charleston and Savannah by 2025-2030<sup>4</sup>, and East Coast ports in need of additional capacity in that same timeframe, the Jasper Ocean Terminal offers a unique opportunity for the region.

Other ports along the East Coast are already taking concrete steps to accommodate the future influx of cargo. In Norfolk, Va., the Virginia Ports Authority is undertaking a massive reclamation project on Craney Island that will grow its cargo capacity. The Norfolk harbor is already 52 feet deep. The Port Authority of New York & New Jersey hopes to expand its container terminal on Staten Island and raise the Bayonne Bridge, while the Jacksonville Port Authority has strengthened ties to overseas shippers and is investing in terminal expansions and joint ventures.

By bringing the Jasper Ocean Terminal online, the two states will have positioned themselves to gain upward of 19 million TEUs annually through the three primary deep-water ports in Savannah, Charleston and Jasper<sup>5</sup>. Furthermore, doing so will accommodate continued export growth in the Southeast, spur accelerated economic growth in the two-state area and strengthen the region as a major player in international trade.

## PANAMA CANAL EXPANSION AND GLOBAL ECONOMIC CHANGES WILL BRING BIGGER SHIPS TO OUR PORTS



**Current "Panamax" Vessels**  
- 4,000-5,500 TEUs



**Future "Post-Panamax" Vessels**  
- 8,000-12,600 TEUs

SOURCE: Courtesy of the Panama Canal Authority

<sup>4</sup> American Association of Ports Authorities; Moffatt & Nichol

<sup>5</sup> Moffatt & Nichol

## THE DEMAND

In 2008, the ports of Garden City (Ga.) and Charleston handled a combined 4.26 million TEUs of containerized cargo<sup>6</sup>. By 2030, it is expected the two ports will be near capacity with a need to handle more than 12.3 million TEUs<sup>7</sup>.

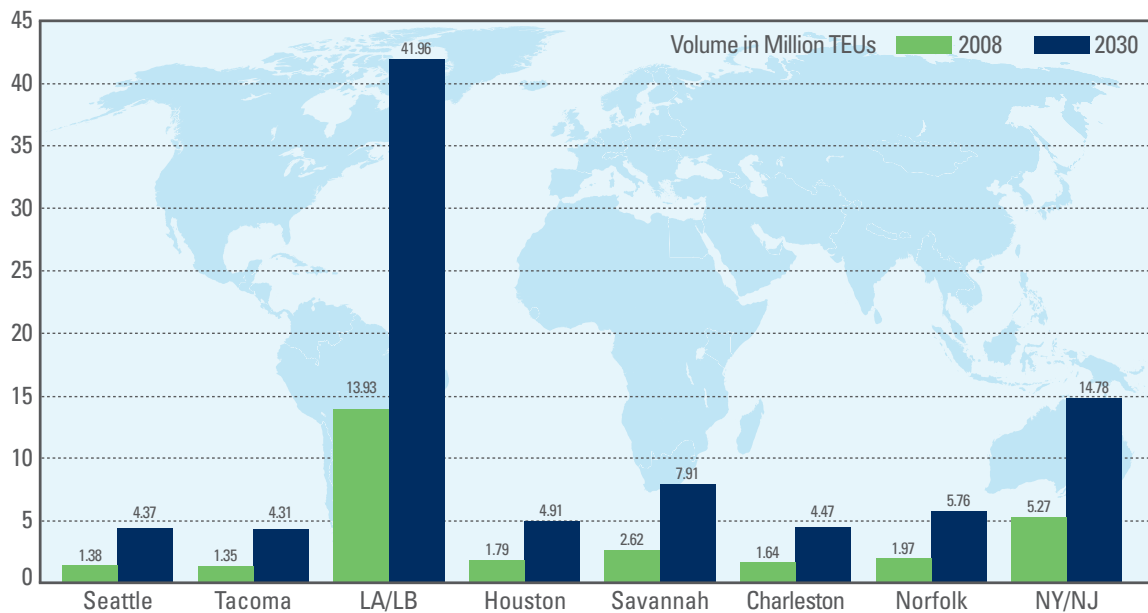
This amounts to a 6 percent annual increase through 2025, which is twice the expected rate of GDP growth, the experience of the last 30 years, as well as a 4.6 percent annual growth from 2025 through 2040. Accommodating this growth requires careful planning and an understanding of a number of factors that make the Southeast a focal point for a boom in container shipping.

Most critically, the Southeast is the U.S. export leader, and this dominant role is expected to increase in the decades ahead. As personal incomes rise in developing nations, much of that money is spent on a key U.S. export: meat. The Southeast is a leading exporter of poultry, pork and beef. Developing nations also have a strong appetite for manufactured goods produced in the South as well as wood fiber and minerals from the region. State and federal governments also benefit from taxes on U.S. exports, which help lower the trade deficit.



Secondly, the Panama Canal Authority will have completed one of its most ambitious goals in time for its centennial in 2014: the deepening

### FUTURE DEMAND AND PORT CAPACITY CONSTRAINTS OPEN THE POSSIBILITY OF AT LEAST FOUR TIMES THE CONTAINER TRAFFIC IN 10 TO 15 YEARS



- Container imports are expected to double by 2020
- Rail freight tonnage is expected to increase by 50% by 2020 and could become a bottleneck

SOURCE: American Association of Port Authorities (AAPA); Moffatt & Nichol; U.S. Army Corps of Engineers

<sup>6</sup> Georgia Ports Authority; South Carolina State Ports Authority

<sup>7</sup> Moffatt & Nichol



of the canal to 50 feet, which will allow a new breed of container ships called “Post-Panamax” to quickly access the Eastern U.S. from Asia. These new Post-Panamax ships will carry 15 to 50 percent more container volume when fully laden than most ships currently visiting Savannah and Charleston.

Deepening the canal could have a larger impact than volume alone. The new, larger ships won’t just carry more containers; they will reduce costs for shipping to Midwestern states via the East Coast by as much as \$400 per TEU, or \$800 per 40 foot container, a 20 percent reduction<sup>8</sup>, making Southeastern ports more competitive for business that has traditionally entered through the West Coast and traveled over land to Chicago, Memphis and other mid-continent destinations.

Container traffic also will continue to grow from the Atlantic Ocean, arriving from Africa and Southwest Asia via the Suez Canal. Trade with Vietnam, Indonesia, India and other nations should increase significantly as they expand their manufacturing capacity and build out their logistics infrastructure. Ships traveling from these regions often use the Suez Canal, which is already deep enough to accommodate Post-Panamax vessels.

It is expected that harbors in Savannah, Charleston and throughout the East Coast will be deepened and expanded to accommodate the new and larger ships by 2015. But will the ports have the capacity to handle the containers?

Moffatt & Nichol has analyzed this pivotal question using data from the Port Import Export Reporting System (PIERS), published in the *Journal of Commerce*, and taking into account expansion plans at leading ports throughout the nation. Southeastern U.S. container port demand will begin to exceed capacity in 2029, and the unmet demand grows to almost eight million TEUs by 2037<sup>9</sup>. The Georgia Ports Authority’s Garden City Terminal and South Carolina State Ports Authority’s Charleston terminals are expected to be near capacity between 2025 and 2030. The Jasper Ocean Terminal will be delivered just in time to ensure that the Southeastern U.S. remains a strong hub for global trade.

## THE BENEFITS

Development of the Jasper Ocean Terminal offers opportunities on multiple levels. The advantages to local communities are obvious, but the region and nation will benefit as well. A new deep-water, state-of-the-art port on the Georgia-South Carolina border will boost international trade for the good of exporting companies and the nation’s trade balance. The new terminal will be more than an economic engine: It will send a message to the world that the Southeast is fully committed not just to the container business, but to working cooperatively to develop state-of-the-art facilities that can accommodate all types of goods and services.

Capitalizing on careful planning, a new site and insights from some of the world’s most advanced ports, plans call for a state-of-the-art “green” port that will use new technology and techniques to drive efficiency and minimize environmental impact.



<sup>8</sup> Moffatt & Nichol

<sup>9</sup> Jasper Ocean Terminal, Preliminary Business Case

### Building a Southeastern hub

Just as the ports of Los Angeles and Long Beach and the Port Authority of New York & New Jersey have built international reputations based on their cooperative approaches to maritime commerce, the Jasper Ocean Terminal offers the opportunity for the two leading ports authorities in the Southeast to do the same (see page 16 for more on the impact on the current ports). Currently a leader in container shipping with a combined 4.3 million TEUs annually<sup>10</sup>, both ports authorities anticipate they will be at or near capacity between 2025 and 2030 as container growth continues. Planning and opening a jointly operated container terminal just eight miles from the open water of the South Atlantic will show shipping lines, and their domestic and foreign trade partners, the region's commitment to an ongoing investment in their business.

### Bolstering international trade

International trade is expected to continue exponential growth well into the middle of this century. The addition of an efficient container port with capacity in excess of seven million TEUs will further enhance the U.S.'s international position as an importer and exporter, offering further capacity not just to the Deep South, but to companies based in Kentucky, Ohio, Indiana and Illinois as well. This 12-state market is home to many of the nation's leading consumer goods companies, as well as top exporters of poultry, chemicals, pulp and paper, kaolin, agricultural commodities, construction equipment and many other top U.S. products. By investing in infrastructure that allows American businesses to serve the world more quickly and efficiently, the two states are preserving jobs and helping corporations grow stronger.



Lower exchange values and rising demand from emerging markets also foster a climate of growth for U.S. exports. This combination will reduce the nation's existing trade imbalance, boosting the overall American economy by aiding the domestic manufacturing sector and generating millions of dollars in tax revenue for the federal government and state governments.

Both states' ports are known for their balance between imports and exports, reflecting the relative health and diversity of the Southeastern economy. In 2010, Georgia's import/export ratio was 48 percent to 52 percent; Charleston's was 50 percent to 50 percent.

### Breaking new ground with a green port

The Jasper Ocean Terminal will have the advantages of a clean slate. For decades, ports around the nation have expanded, but are often constrained in terms of efficiency and innovation by existing site conditions, brownfield challenges and ongoing operations.

By building on a new site atop dredge material, the Jasper Ocean Terminal will turn an underutilized location into an economic engine that will be an international model for the use of cutting-edge technology to improve customer service, create high tech jobs and minimize environmental impacts in a port setting.

<sup>10</sup> American Association of Ports Authorities; Moffatt & Nichol



### Green technology

The Joint Project Office has committed to building a best-of-class green terminal. Engineering firm Moffatt & Nichol is utilizing its green building experience on the Jasper Ocean Terminal. State-of-the-art technologies will allow storage, sorting and retrieval of specific containers with minimal handling. The only planned buildings on site (an administration/operations building and maintenance facility) are expected to be LEED-certified through the use of careful building siting, construction with recycled materials and energy-efficient equipment. Other green plans for the site include:



- **Smart grid:** Preliminary plans call for the installation of a smart grid on the site, which will allow energy to be recaptured from quay and yard cranes as they deposit containers. This energy can be returned to the grid, allowing for a net-zero effect when it comes to power use.
- **Alternate energy:** The location of the port across from one of the nation's largest liquid natural gas terminals could offer the ability to utilize LNG as an alternate fuel.
- **Shore power systems:** Container berths will be designed with a shore-power system to allow vessels to shut-off on-board generators and use on-shore electricity to reduce emissions. This system is particularly effective for longer stays at berth and is normally associated with larger vessels.
- **Best-of-class terminal operating system:** An integrated terminal operation system will efficiently coordinate operations by minimizing the number of moves for each container from ship to truck or train.
- **Electric emphasis:** The Jasper Ocean Terminal is expected to rely heavily on electric-powered container handling equipment, drastically reducing the carbon footprint of terminal operations.
- **Energy reduction:** Use of sophisticated, motion-sensitive lighting systems balance worker safety and energy reduction. These lighting systems eliminate light pollution while also saving energy and money. The net result will be an innovative container terminal that is safer, quieter, more energy efficient and environmentally friendlier that blends in well with the sensitive surrounding ecosystem and residential communities.

### Site advantages and aggressive mitigation

The 1,500-acre site, due to its location on recovered dredge material, will require little mitigation, and it offers the unique opportunity to develop a major terminal with minimal impact on existing marsh front and beachfront property, residential homes and commercial developments.

Providing infrastructure to the site will require road, rail and utility access across wetlands. These access points will be extensively mitigated by preserving and replenishing sites elsewhere in the immediate area. The infrastructure also will feature the most advanced construction techniques to reduce environmental impact and minimize footprint size. A lack of at-grade crossings will limit noise pollution for inbound and outbound traffic, and the latest technologies will be used to make sure water, power and other utilities are delivered to the site with the least possible impact.

## Local economic impact

With its location on the Savannah River along the Georgia-South Carolina border, both states will benefit significantly from the development of the new terminal. Specifically, construction of phase I of the Jasper Ocean Terminal, as currently planned, has the potential to create:

- One million jobs both at the port and in spin-off business by 2040<sup>11</sup>.
- More than 900 direct and indirect jobs annually in construction and engineering from 2020-2025 to install the necessary infrastructure (roads, bridges, utilities) and build out the first phase of the terminal<sup>12</sup>, including \$81 million in total wages paid over the life of the build out.

## South Carolina and Jasper County

Residents of South Carolina's Jasper County have been working for decades to secure a port on the South Carolina side of the river. With a 20.7 percent poverty rate<sup>13</sup>, Jasper County is one of South Carolina's poorest counties. The benefits of a deep-water container port are many:

- Jasper County offers any number of greenfield sites that are ideal for distribution facilities. A planned interchange on I-95 will create additional opportunities for port-related development.
- Various studies have projected the creation of thousands of jobs for residents of Jasper and surrounding counties from development of the port and ancillary facilities. More importantly, the jobs will offer relatively stable, high wages and full benefits, and help shift the economy of the region. Residents will become less dependent on service jobs in the tourism and resort industries in neighboring Beaufort (S.C.) and Chatham (Ga.) counties.
- By building on an existing dredge site, the project will transform an underutilized portion of the county into an economic engine for the region. The necessary upgrades in infrastructure—widening of U.S. Highway 17 and revitalizing existing and building new rail lines—will lay the foundation for future commercial and residential growth in Jasper County while employing additional residents.

One of the original reasons for the development of a port in Jasper County was to help lift many of the residents of Jasper and surrounding counties out of chronic poverty. High-paying, high-quality jobs in the international trade supply chain will support that transition.

Ripple effects of the Jasper Ocean Terminal carry beyond the Lowcountry. Columbia, Anderson and Greenville-Spartanburg have made a concerted effort to grow their international profiles. Companies such as BMW, Michelin and many others employ thousands and are critically attuned to the competitive nature of international commerce. They are active importers and exporters.

## Georgia

For Georgia, the case for the Jasper Ocean Terminal is simple mathematics. Most importantly, the state can continue to expand its highly successful container business as capacity becomes constrained at the Georgia Ports Authority's existing terminals. Also, many of the shippers can be expected to use existing or planned distribution facilities in Chatham and Bryan counties for goods that come off the ships at Jasper.

Georgia is home to leaders in international trade like AJC International, the world's largest importer and exporter of proteins, and



<sup>11</sup> University of Georgia economic study; Wilbur Smith & Associates

<sup>12</sup> Moffatt & Nichol

<sup>13</sup> 2008 U.S. Census Estimate

companies such as The Home Depot, Georgia Pacific, GE Energy Systems and others that are critically reliant on increased port capacity for both imports and exports. These Georgia-based businesses will benefit from the efficiencies and savings of a regional port, making them more competitive in an expanding global marketplace.

## TECHNICAL DETAILS

Engineering, planning and permitting a new container port is a complex undertaking, requiring up to eight years to complete.

For those eager to get construction underway, the wait can be frustrating. However, careful planning and permitting ensure not only compliance with federal law, but protection of the environment around the site and region. The Joint Project Office has retained the services of Moffatt & Nichol, one of the nation's pre-eminent maritime engineering and planning firms, to help move through the process.

Prior to the permitting process, Moffatt & Nichol is working with the Joint Project Office on various preliminary reports ranging from economic justification for the project to design schematics. After approval from the Joint Project Office, an application for a permit will be filed.

Once underway, the permitting process will involve meticulous planning, careful analysis and intense public outreach. Federal law, including the National Environmental Policy Act (NEPA), requires that any federal action incorporate environmental values into its decision-making process. This is done by evaluating the project's impacts on the environment and exploring reasonable alternatives.

Instrumental to this process is the Corps' preparation of an Environmental Impact Statement (EIS) that identifies the best ways to develop the project while mitigating environmental impact. A public document with numerous opportunities for comment from community groups and government agencies, the EIS is developed by an independent consultant selected by the Corps. This work would be contracted for and funded by the Joint Project Office.

Another important task for the Joint Project Office will be preparing a Sponsor Plan to supplement the U.S. Army Corps of Engineers' Dredged Materials Management Plan (DMMP) for the Savannah Harbor. The Jasper Ocean Terminal will be built on an existing dredge site, relying on material from the FY96 Dredge Plan, as well as from the construction phase of the planned SHEP, to elevate the site and lay the foundation for the terminal's construction.

Once the permitting process is completed and construction is set to begin, a location must be established to accommodate future dredged material from the Savannah River that would otherwise have been deposited on the terminal site. Several options will be outlined in the Sponsor Plan, including alternative sites and the likely use of an existing Offshore Dredge Material Disposal Site.

Based on coordination with the U.S. Army Corps of Engineers, it is anticipated that the permitting timeline will run from 2012 through the end of 2019, with design and construction slated to begin shortly thereafter.



### **Status of the easement**

The U.S. Army Corps of Engineers currently holds an easement on the proposed site, which it uses as a confinement facility for dredge material from the Savannah River. Every three years, the Corps pumps material onto the site to maintain the river's current depth of 42 feet.

The Jasper Ocean Terminal will have to be built upon solid footing, and it also will have to be above the 100-year flood plain. Current planning is to be 15 feet above the river for the terminal, while the dock and buildings will be elevated by 16 feet. The initial SHEP material will help in raising the site, while at the same time save the overall project an estimated \$300 million in construction costs.

While it may seem unusual to build a site on dredge material, this is a proven approach that may actually keep capital costs down. The ground will be prepared through the rather simple process of surcharging: At first, perforated pipes known as wick drains will be installed in the existing soil to remove moisture from the subsurface layers of sand. Then suitable fill material is placed on the site to compress the previously deposited dredged material. In approximately one year, the weight of the placed fill material will slowly compress the lower layers of moist sand, forcing ground water up and out, ultimately reducing the potential occurrence of global settlement in the future.

As a condition for releasing the easement, the Corps has said the two states must work jointly on the new port and craft a viable plan for its development. A congressional authorization even addresses the requirements that must be met for release of the easements (full copy of text on page 19). Included in these requirements are the preparation of a Sponsor Plan, bi-state agreement on governance of the Jasper Ocean Terminal, and plans for financing the port.

The Joint Project Office has been in constant contact with the Corps throughout the preliminary stages. As of now, the existing project timelines anticipate release of the easements in 2019 after completion of the permitting process and demonstrated progress in other areas listed above.

### **Deepening the Savannah River**

Stretching from the mouth of the river all the way to the Garden City Terminal, SHEP will deepen the waters of the Savannah River from 42 feet to 48 feet and provide greater access for Post-Panamax container ships to Garden City and Jasper.

The development of the Jasper site is predicated on the success of ports in Charleston and Savannah. A completed SHEP and the planned expansion in Charleston are the first steps to accommodating the supply of containers that ultimately will fuel a successful Jasper Ocean Terminal. It is intended to complete additional channel deepening and widening of the channel to effectively accommodate the Post-Panamax ships.

### **Other environmental concerns**

Since the terminal is being built on land reclaimed from the river bottom, no mitigation will be needed on the actual site. However, project infrastructure will impact some existing wetlands.

As outlined on page 9, aggressive steps are being taken to mitigate the off-site environmental impacts.

Within the 1,500-acre terminal, several "critical areas" have been identified, including numerous "bird islands" and tidal wetlands that will be impacted by the construction of transportation infrastructure. Out of more than 3,300 acres of wetlands, there are 226 acres that will be impacted by the development of the transportation corridor, and, in accordance with the Corps' protocol, the Joint Project Office will purchase mitigation credits within a 10-mile radius as an offset.

## Connecting the infrastructure

This port needs to have multi-modal access to best facilitate the transport of its cargo to inland distribution centers, storage areas and ultimately consumers in the heartland. Service by rail and road is crucial, and the Jasper Ocean Terminal features a comprehensive plan to link the facility to major transportation corridors.

Winding its way through wetlands and marshes, a new rail corridor will span eight miles and connect the now dormant Hutchinson Lead with Jasper Ocean Terminal during phase II of the project.

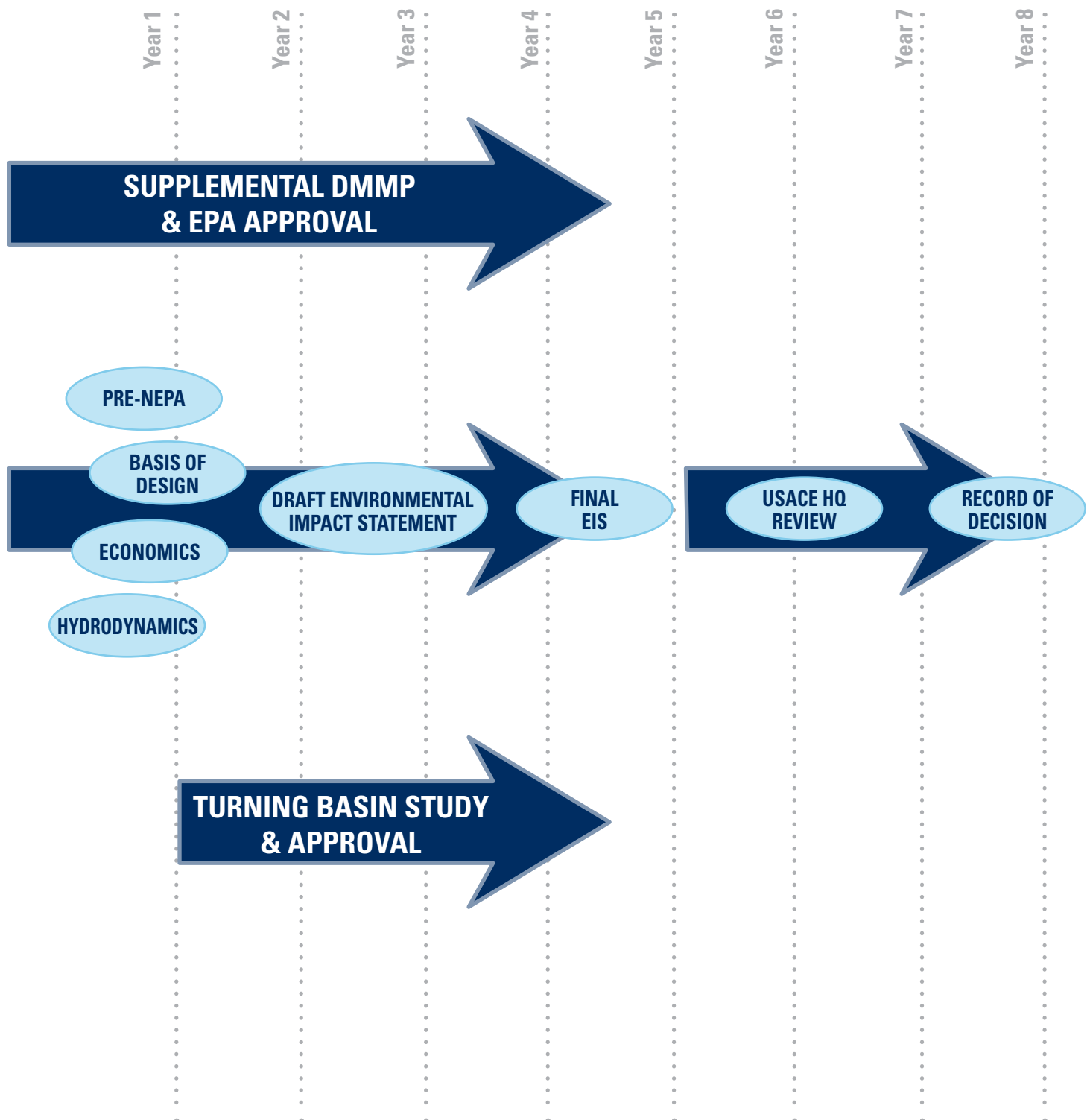
The two Class I railroads that serve Savannah are CSX Corporation and Norfolk Southern, and the Jasper Port Authority intends that both will have dual access to Jasper Ocean Terminal. This accessibility will require the creation of a marshalling yard near the CSX Mainline at the Hutchinson Lead and a state-owned rail spur from the yard to the terminal.

To accommodate trucks, plans call for widening U.S. Highway 17 to four lanes from the Savannah Harbor Parkway to SC 170 Alternate, as well as from SC 170 Alternate to SC 170 West. In addition, a four-lane, divided, limited-access highway will be needed to connect the Jasper Ocean Terminal to U.S. Highway 17. A new South Carolina interchange on I-95 being sought by private developers could also serve trucks carrying containers.

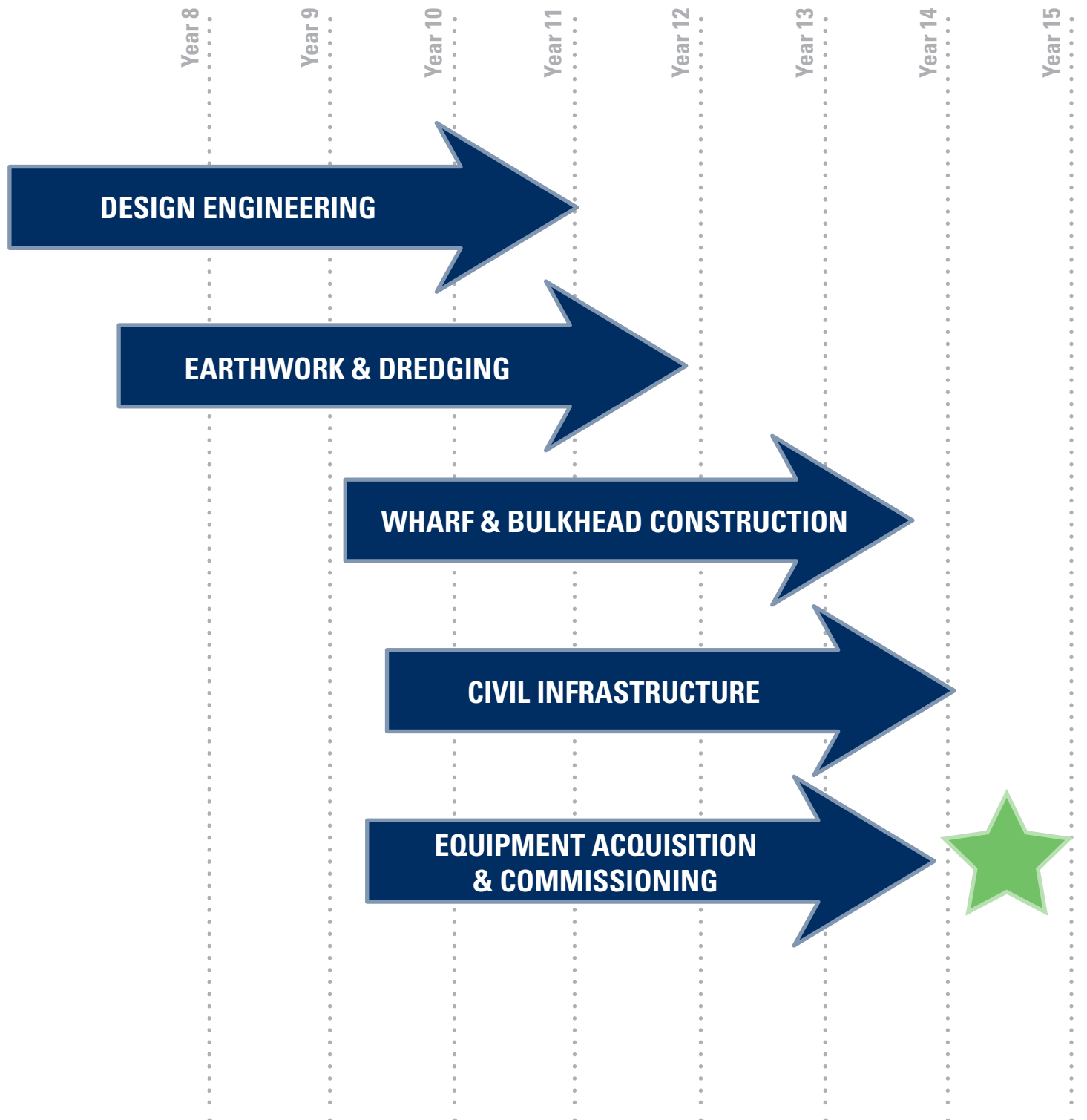
Water, sewer, electric and telecommunications services will be provided by South Carolina Electric & Gas, Beaufort Jasper Water & Sewer Authority and Hargray Communications. All three providers have included the Jasper Ocean Terminal in their long-range master plans.



## JASPER PORT TERMINAL PROJECT TIMELINE







## STRENGTHENING OUR TWO PORTS AUTHORITIES

Georgia and South Carolina have proud legacies as centers for commerce. Indeed, both states were founded in port cities, and maritime commerce has remained a foundation of their economies ever since.

Today, the commercial port activities in each state are directed by ports authorities, quasi-public agencies chartered by the respective state governments. The model used in Georgia, South Carolina, and a few other states is widely seen as the most cost-efficient approach. The ports authority model also allows states to control key investments in port infrastructure and closely track the economic impact of those investments.

The South Carolina State Ports Authority (SCSPA), based in Charleston, was founded in 1942. It oversees five separate terminals in Charleston that serve the container and Ro-Ro markets, and one in Georgetown that is a smaller, break bulk facility.

The Georgia Ports Authority (GPA) is headquartered in Garden City, just west of Savannah. It oversees six terminals in Savannah and Brunswick, including the flagship container terminal at Garden City, a break bulk facility along the Savannah River, and another in Brunswick that serves primarily as a Ro-Ro facility.

Planning for the future is critical for ongoing strategic and future planning is critical to the success of any port, and both ports authorities are planning for growth after strong growth in 2010. GPA is in the midst of deepening the Savannah River to accommodate Post-Panamax vessels. SHEP is expected to be completed in 2016.

As part of a 10-year, \$1.3 billion capital plan, SCSPA is adding three new berths at a new terminal on a former Navy Base site and is also in the early stages of planning to deepen the harbor in Charleston.

The two authorities, historically fierce competitors, have committed to work together on the Jasper Ocean Terminal. The project will have the benefit of established and proven planning processes that have been successful in Georgia and South Carolina. In both states, the systematic, strategic expansion of ports has generated hundreds of millions of dollars of economic impact, millions of tax dollars and thousands of jobs.





## THE ROAD FORWARD

Since Governors Sanford and Perdue set the Jasper Ocean Terminal in motion more than three years ago, tremendous progress has been made. As discussed earlier, the two ports authorities are fully engaged, lending their credibility and planning skills to the process.

To move the Jasper Ocean Terminal to reality, several key issues must be resolved in 2011 and 2012:

### **Budget**

The current Joint Project Office is working from a \$6 million allocation split by the SCSPA and the GPA. These funds should be sufficient to fund activities through 2011. Once the permitting process begins, each state will need to devote \$1-2 million annually to cover the necessary costs. State leaders and the ports authority boards need to determine the best funding mechanism for planning, engineering, future permitting and eventually construction.

### **Further economic analysis**

While a preliminary economic analysis was conducted in 2009, and additional studies from the University of Georgia and Wilbur Smith and Associates make a solid case for the port, it is expected that post-recession analysis could show an even stronger need for the Jasper Ocean Terminal. The Joint Project Office expects to task Moffatt & Nichol with an in-depth economic analysis and feasibility study as part of its program of work.

### **Governance**

As required by law, the Joint Project Office has drafted a bi-state compact and submitted it to the state legislatures for review. In 2011, additional attention will be given to how the operations of the port will be handled, including questions related to jurisdiction, revenue sharing between ports authorities, and additional considerations.

### **Permitting**

Permitting for harbors has become more complex. Federal resources are limited in a post-recession atmosphere, and it is likely the Jasper Ocean Terminal will have to self-fund many of the studies undertaken by the U.S. Army Corps of Engineers and other governmental bodies. The GPA and SCSPA also have other significant capital projects at various stages of the permitting process that must be considered. Developing a clear path to permitting will be a critical effort for the board in 2011.

## FREQUENTLY ASKED QUESTIONS



### Who will pay for it and how much will it cost?

The intergovernmental agreement signed by the governors of Georgia and South Carolina calls for the two states to share in the capital costs for developing the Jasper Ocean Terminal. The states have already shared the expense of acquiring the land and preliminary planning and engineering. Given the expense of developing the port, the board and ports authorities expect to find creative ways to engage private sector investment in the project.

The total cost of the project—covering construction, dredging, infrastructure developments and other direct and indirect expenses—is expected to be in excess of \$4 billion. Phase 1, which is projected to begin construction in 2020, will cost approximately \$1.7 billion. Annual investments in the \$1-2 million range per state are necessary over the next 10 years to fund the permitting process and make sure Georgia and South Carolina will have the opportunity to capture the growth in the U.S. container market.

### How will it be governed?

Oversight for the Jasper Ocean Terminal during the permitting process is shared by the GPA and SCSA through the Joint Project Office. A draft of a bi-state compact has been submitted to the state legislatures for their consideration.

### Won't the Jasper Ocean Terminal compete with Charleston and Savannah?

Success at Charleston and Savannah are a pre-condition for development of the Jasper Ocean Terminal. Plans call for the new port to come online in 2025 when both Charleston and Savannah are expected to be at capacity. The Jasper Ocean Terminal will be jointly managed by Georgia and South Carolina. Given that container traffic will continue to migrate to the existing ports, the Jasper Ocean Terminal will be utilized as a cooperative expansion of terminal space that will maximize the port investments already made in both states and provide economic benefits to both states.

### What is the role of the U.S. Army Corps of Engineers?

The primary role of the Corps is to prepare the Environmental Impact Statement. It also holds the easement that, for now, limits the development potential of the Jasper County site.

Currently, the site stores dredge material from the maintenance of the Savannah River. Before construction begins, the U.S. Army Corps of Engineers will have to release the easements. This will only occur pending acceptance of the Joint Project Office's proposed Sponsor Plan that identifies an alternative location to place dredge material and how any incremental increase in cost will be funded.

According to Gen. Joe Schroedel, former commander of the South Atlantic Division of the Corps, any release of the easement is contingent upon cooperation of the two states. In the 2007 Water Resources Development Act, the U.S. Congress passed legislation that instructed the Corps to release the easement once both states have reached a mutually acceptable governing structure<sup>14</sup>:

(a) In General- The Secretary shall determine the feasibility of carrying out projects—

- (1) to improve the Savannah River for navigation and related purposes that may be necessary to support the location of container cargo and other port facilities to be located in Jasper County, South Carolina, in the vicinity of Mile 6 of the Savannah Harbor entrance channel; and
- (2) to remove from the proposed Jasper County port site the easements used by the Corps of Engineers for placement of dredged fill materials for the Savannah Harbor Federal navigation project.

(b) Factors for Consideration- In making a determination under subsection

(a), the Secretary shall take into consideration--

- (1) landside infrastructure;
- (2) the provision of any additional dredged material disposal area as a consequence of removing from the proposed Jasper County port site the easements used by the Corps of Engineers for placement of dredged fill materials for the Savannah Harbor Federal navigation project; and
- (3) the results of the proposed bi-state compact between the State of Georgia and the State of South Carolina to own, develop, and operate port facilities at the proposed Jasper County port site, as described in the term sheet executed by the Governor of the State of Georgia and the Governor of the State of South Carolina on March 12, 2007.



The Corps also will work with the Joint Project Office on issues of environmental mitigation and permitting. As part of the attempt to curb the impact from the transportation corridor, mitigation credits will be purchased and applied in accordance with existing Corps protocol.

### **Why will it take 14 years to get the Jasper Ocean Terminal online?**

As with any port project, there is a considerable amount of time needed to evaluate the feasibility of a targeted site, understand potential environmental impacts and secure the necessary permits needed to move ahead with construction. Much work has already been done, but the Joint Project Office has been notified by the U.S. Army Corps of Engineers to expect an eight-year

<sup>14</sup> 2007 Water Resources Development Act

permitting process, as well as two additional years for final design and three years for construction.

In the wake of Hurricane Katrina, the Corps requires additional analysis and reviews to help verify the integrity of the project and its impact on the environment. As part of this process, an independent third-party will conduct its own site analysis and project review to determine if the project can move forward.

These processes, while lengthy, are essential and part of the protocol that accompanies the development of any port.

### **Would a smaller, non-container terminal be a viable alternative?**

Developing a port that specialized in smaller cargo (i.e. bulk goods, liquids) has been proposed as a faster alternative. However, the permitting and infrastructure needs for a smaller port are nearly identical to the proposed container terminal. For instance, it would still take eight years to permit a smaller port. While the time taken to construct the terminal and conduct environmental mitigation could conceivably be shorter, significant investments associated with permitting and infrastructure development remain.

Furthermore, in order for the Corps to agree to release the easements, the project must pass a host of stringent environmental and economic hurdles that a smaller port is not likely to pass. In recent years, smaller ports that focus on non-container cargo, such as Port Royal, have struggled financially in the two-state region.



Container terminals offer the highest return on investment, which is crucial given the significant capital costs of such a project. In Jasper Ocean Terminal's case, it is doubtful a smaller port would generate enough revenue to justify the necessary infrastructure and permitting costs.

### **Why containers?**

The decision to plan an international deep water container port at the Jasper site was based on an extensive study of global shipping trends. Traditional industries, including foodstuffs manufacturers, pulp and paper companies and mineral industries also are moving aggressively toward greater containerization, and have critical mass in both Georgia and

South Carolina.

With both Charleston and Garden City expecting to run out of container capacity by 2025, expanding the container business at Jasper to the benefit of both authorities makes strategic and economic sense. The return on investment from a container operation is more consistent and higher than from any other type of shipping, allowing for a quicker pay-off for the extensive infrastructure cost. Given the high expenses associated with the off-site infrastructure, as well as the length of time required to obtain a permit, it is necessary that a long-term investment be made in a container terminal that supports Southeastern exports and imports.

Without the additional capacity provided by the Jasper Ocean Terminal, both authorities fear congestion at their existing terminals. Meanwhile, investments at competitive ports in Norfolk, Jacksonville and elsewhere will begin to draw container market share. Focusing on container shipping at the Jasper Ocean Terminal allows both states to preserve their leadership in the container industry, maximize their investments at existing facilities in Charleston and Savannah, and allows time to permit and build the terminal of the future in Jasper County.

### **What is the projected economic impact of the Jasper Ocean Terminal?**

The Jasper Ocean Terminal has the potential to create one million jobs in Georgia and South Carolina and generate more than



\$9 billion in tax revenue for the two states<sup>15</sup>. With the coming investments in road and rail infrastructure, Jasper County, as well as neighboring Beaufort, Hampton, Allendale and Colleton counties, are positioned to attract complementary industries such as distribution centers and cargo storage that will actualize the immediate economic potential for the community.

More than 900 direct and indirect jobs will be created through the construction of the Jasper Ocean Terminal with more than \$210 million in wages generated<sup>16</sup>. It is expected that these projects would begin in 2020, creating more near-term impact.

### **How strong is your economic data?**

The Joint Project Office is confident in the existing economic evidence it has for the project. The economic data, compiled in 2010, is drawn from multiple credible sources, including studies conducted by the University of Georgia, Wilbur Smith & Associates and Moffatt & Nichol.

As we develop additional information about the cost of the construction project, we will periodically commission studies to update our projections.

### **What does SHEP have to do with the Jasper Ocean Terminal?**

SHEP is sponsored by the GPA to provide Post-Panamax access to the Garden City Terminal. It will provide two benefits to Jasper. First, the dredged material from the deepening will serve as the fill dirt for the new port, elevating the site above the flood plain and saving more than \$300 million in site preparation costs.

In addition, it will deepen the river to 48 feet to the Jasper Ocean Terminal from the harbor entrance, contributing to the ultimate depth for the terminal.

### **But, we're not at capacity yet, so why plan the Jasper Ocean Terminal now?**

There are several reasons planning has begun and must continue.

First, it will take eight years (or more) to plan and permit a major ocean port, two more to design it and three to build it. As a result, any delay in moving ahead with the project subjects Georgia and South Carolina to losing market share when demand is at its greatest.

Also, the influx in trade is coming regardless. Emerging trade patterns from the Far East, strong export markets and population growth in the Southeastern U.S., the expansion of the Panama Canal and the increasing use of the Suez Canal as a trade route all point to increased shipping traffic on the East Coast. If forward-thinking action isn't taken now to accommodate this growth, that traffic will bypass our region and move elsewhere, putting our businesses and economy at a disadvantage.

### **How are you engaging the private sector?**

Bringing the private sector into the Jasper Ocean Terminal is an important piece of its long-term success, and steps are being taken to identify viable private partners. It is not likely that federal or state money will cover the cost of the project, so Georgia and South Carolina may need additional capital to move forward.

Port leaders will look at all options for engaging the creativity and resources of the private sector in this project while preserving a structure that is efficient and effective for the terminal. As well as its indirect impact on the economy, the port will generate a positive return on investment. Because of this, it will be appealing to potential investors and will be able to attract private capital if needed.



<sup>15</sup> University of Georgia; Wilbur Smith & Associates; Moffatt & Nichol

<sup>16</sup> Moffatt & Nichol

One option is the signing of long-term leases with shipping companies.

### **Can Georgia and South Carolina cooperate?**

The boards of both ports authorities and the board of the Joint Project Office, which manages the Jasper Ocean Terminal, are committed to a container port at the site.

As noted earlier, success in Charleston and Savannah are pre-conditions for success in Jasper County. By working collaboratively on the Jasper Ocean Terminal, the two states will position their coasts as a global hub for trade, reap tremendous economic benefits and lay the foundation for future regional projects that will better serve their citizens and the entire region.





#### **The Joint Project Office**

##### **Board of Directors**

Dave Posek, Chair, Pawleys Island  
Jim Balloun, Vice-Chair, Atlanta

Bill Bethea, Hilton Head Island  
Steve Green, Savannah  
Alec Poitevint, Bainbridge  
Bill Stern, Columbia

##### **Ex-Officio Members**

Curtis Foltz, GPA, CEO  
Brandon Gaskins, Charleston  
Jim Lientz, Atlanta  
Jim Newsome, SCSA, CEO

Doug Marchand, Executive Advisor



